## ABSTRACT OF THE DISCLOSURE

A method and apparatus for coupling a voiceband modem circuit to a common phoneline connector, the common phoneline connection having a ring line connection and a tip line connection which couples a ring/tip line pair to a subscriber loop circuit, the voiceband modem circuit operating in a voiceband modem operating frequency band and having a voiceband modem interface ring line and a voiceband modem interface tip line. The voiceband modem interface ring line is coupled to the ring line and the voiceband modem interface tip line is coupled to the tip line connection by inserting, between the ring line connection and the voiceband modem interface ring line and between the tip line connection and the voiceband modem interface tip line, a series pair of inductors. A first inductor of the series pair has a low inductance and a high self-resonant frequency and a second inductor of the series pair has a high inductance and low selfresonant frequency. The low inductance, the high self-resonant frequency, the high inductance and the low self-resonant frequency are each determined to locate a filtering cutoff point between the voiceband modem operating frequency band and a digital subscriber line operating frequency band.

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